The Experience of Online Learning: Evaluating the effectiveness of an Innovation in Web-Based Legal Education

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Abstract

The World Wide Web has dramatically expanded access to legal resources and is increasingly being used for the teaching of law. However, expansion of its use for pedagogical purposes has been limited by the limited appeal of law subjects beyond the state or national border, as different laws apply in different jurisdictions. Consequently, online learning is usually combined with traditional localised learning experiences. The study of legal issues to which the Internet gives rise provides a unique opportunity in the discipline to study the cross-jurisdictional issues which emerge from its use. The global relevance of the content also provides the opportunity to further develop the use of the medium for learning and teaching. This paper deals with the learning experience of a group of students who studied the law of the Internet solely via the Internet. In designing the online learning environment, attention was given to learning assumptions which support the role of experience, context and cognition in learning, and particularly the facilitation of individual and social construction of meaning. To explore the appropriateness of features of the environment for enhancing the learning and teaching of law, evaluation results are considered in the context of literature on the experience of learning, and the practical issues raised by implementing an innovation in an institutional context not fully prepared for it.

Introduction

This paper is about a small class of graduate and undergraduate law students experiencing a totally online learning environment for the first time, in a faculty which had not previously offered online (or distance education) subjects, and studying within a discipline which has presented some barriers to the development of online education. Given the pace at which the introduction of online subjects is proceeding in university systems across the world, let alone the pace at which content is being delivered online, this experience is a tiny component of a global phenomenon. However, pausing to consider issues that emerge in cases such as this may provide an opportunity to convey messages of use to others who are yet to confront the transition from face-to-face to online education.

Focusing an evaluation on the learner's world - on the learning experience 'as a dynamic between a learner and a course in its institutional context' (Morgan & Beaty, 1997:217) - would appear to have much to offer in examining the experience of the novice online learner. Add to this the experience of the teacher, and new perspectives of the situation come into view. The metaphor of a flashlight (Ehrmann, 1997) is appropriate, as the beam of the torch brings a range of factors affecting the learning transaction more sharply into the light. Clearly there are also other stakeholders in the learning experience, and institutional circumstances exert a powerful influence (Rice, 1997). However, both the issues of identity which emerge in online communication (Turkle, 1997), and the potential of a phenomenographic approach for exploring student learning from the point of view of students themselves (Marton, 1994), support the value of closely observing the experience of those immediately involved, as part of an effort to place pedagogical considerations at the centre of innovative developments.

This approach also appears appropriate given many of the current assumptions about how students learn. For example, how can one explore what it means to engage students in authentic learning tasks based on situated cognition (Brown, Collins & Duguid, 1989) without examining the quality of learning and teaching in context (Ramsden, 1992)? How can one evaluate individual or social construction of meaning (Jonassen, 1999; Vygotsky, 1978), or the development of students' conceptual worlds through discussion, interaction, adaptation and reflection (Laurillard, 1993), without also closely engaging with them, and those with whom they interact, in reflecting on the experience? To evaluate in this way means that the issues that emerge are the issues of the participants, not

those of the evaluator, although dialogue is likely to engender mutual understandings.

Hence, the primary approach used in this evaluation, sought 'an empathetic understanding of what is involved in student learning derived from students' descriptions of what learning means to them' (Entwistle, 1997:13). However, while the primary methodology was therefore qualitative, the combination of strategies used place the overall approach within an eclectic-mixed methods-pragmatic paradigm (Phillips et al, 2000) with the associated freedom to tailor aspects of the evaluation to specific characteristics of the situation at hand. This paper considers aspects of the first offering of the online subject, Law of the Internet, obtained from a longitudinal, semester length evaluation, in order to highlight its strengths, and issues it raised for future development of this and other online subjects, given the institutional context in which it was offered.

Evaluation Context

Most of the learning associated with the subject was designed to occur via a web site divided into ten modules (reflecting ten different aspects of the law as it relates to the Internet), linked to a conferencing and assignment submission system which was selected for use because it had been developed for distance education students and was therefore supported by the University (see de Zwart & Benson, 1999). The web site included an optional Internet Skills Module as it was anticipated (from experience in teaching the subject face-to-face) that many potential students might have minimal computer skills.

Although the evaluation was to focus on pedagogical issues, it was recognised in the period prior to the offering (which included a pre-semester trial) that a number of administrative and technical issues were likely to impact on student and teacher experiences. In particular:
- The nature of the subject challenged administrative systems both in the Law Faculty (where processes for dealing with distance education students were not in place) and the Centre for Learning & Teaching Support (where processes for dealing with the distribution of paperless subjects had not been established). Lack of advertising of the subject's availability resulted in a low and late enrolment in the subject.
- The conferencing system involves a number of start-up procedures, which include delivering of manuals and passwords to students, adding

students' names to newsgroups, and student configuration of browsers
to enable access. As the subject's design required interactivity within
specified weekly or two-weekly time frames (so that students were
focusing and communicating on the same issues at roughly the same
time), delays in these processes, exacerbated by late enrolments, had a
major impact on the smooth running of the subject.

Further issues to emerge as the semester began were access problems
caused by firewalls, difficulties of some students in using the conferencing
system, and almost universal problems in using the authenticated
assignment submission system.

Despite limited advertising, ten students began to study the subject (three
on-campus, four in Melbourne, one in regional Victoria, one in Malaysia,
and one in Germany). Two withdrew early in the semester, one because of
other study commitments and problems relating to the conferencing
system, and the second as a result of losing access to a computer. A third
student withdrew later in the semester because of illness.

Evaluation Design and Implementation

The primary evaluation strategies were as follows:
- A sample of the student group was emailed on a rotating basis
  throughout the semester (roughly once a week) and asked to reflect on
  experiences that week, and to respond as if writing a letter or reflective
  journal entry.
- The teacher (subject coordinator) prepared monthly reviews of her
  responses to the subject and these were followed by an interview at the
  completion of the subject.

Three further strategies were included. The first of these, originally
designed for the pre-semester trial, was retained for the initial offering as
it was considered that it might elicit information at a level of detail not
otherwise provided for. The other two were intended as permanent
features of the site:
- 'Evaluate now' buttons were placed throughout the site as an
  opportunity to obtain feedback on aspects of individual pages.
- Feedback forms were included in each of the ten modules. These
  requested comments on helpful aspects and suggested improvements
  for each of the module components. Provision for emergency feedback
  was also included.

- A subject evaluation form was included for completion at the end of the subject. This requested a scaled response on 21 aspects of the subject, together with reasons for each response, plus three open-ended questions to gain overall responses.

It was recognised that the multiplicity of strategies might reduce responses on individual instruments, though some benefits from triangulation were anticipated. Overall, two in three responses were received to requests to participate in the week-by-week evaluation, while four students used one or more of the additional strategies.

Results were grouped within three time frames for analysis (Weeks 1-4, 5-8 and 9-13) with subject evaluation forms and the interview with the subject coordinator used for a final overview of the experience. Responses from all sources were then analysed to identify the main themes which emerged. Results were reported in the context of these themes, with related comments grouped together. Reporting included extensive use of quotations to allow participants to speak for themselves.

Evaluation Results

Results from all time frames and sources are summarised under the following headings:
- General response to the online learning experience
- Access and technical issues
- Online tasks and discussion
- Time and workload

General response to the online learning experience

Technical problems aside, the students' responses to the subject were positive from the start, with comments referring to site design and functionality, provision for interactivity, and access to comprehensive resources. For example:

> Unlike traditional distance education, Internet education promotes interactivity, so I'm pleased that this is a big component of the course. I also like the convenience of being just a click away from the materials/resources used in the course.

A student with limited computer experience was fascinated by the availability of resources:

> … one hyperlink leading to several others was incredible. At times, I felt really overwhelmed and was unsure where to stop resourcing the resources …

References to interesting content and enjoyment of the experience continued throughout the semester:

> Overall, I am enjoying the subject immensely, more than anything else I have studied (and I have done a Grad Dip in IP Law at Uni of Melb and a few subjects by distance ed at Monash). I would love to see other subjects in the LLM program offered on-line. Congratulations!

There were also many positive comments about flexibility ('I do not feel divorced at all from being part of a class') and the subject was seen to be 'a perfect "fit" with the mode of delivery'. Contact with the subject coordinator was particularly appreciated ('Melissa clearly believes in keeping in contact with the students and cracks the whip at times. I see this as a good thing'). But there was also some ambivalence ('I would prefer to be studying at least part of this subject in a real world environment') and the subject coordinator noted how a student could be 'thrilled … because I've been looking all over the world for this and I don't have to travel' yet could also feel 'disadvantaged by the fact that I am studying in this mode.'

For those who engaged well with the subject as it had been designed, she could see clear pedagogical benefits:

> … the understanding of what it was that they were dealing with was stronger than it had been perhaps in some previous years where they demonstrated a theoretical but not a practical knowledge of the subject matter.

However, a number of issues emerged which reflected students' lack of familiarity with this new way of learning. Failure to read instructions was a particular problem with consequences that included inadequate task and discussion responses, or lack of attention to their scheduling. The subject coordinator considered that the experience indicated that 'we are going to get there with flexible learning' but she saw a clear distinction between 'highly motivated students who are off-campus largely' and 'on-campus students, who really don't want to study in that way because it's too much work.' She noted the importance of realising that this environment is 'not a substitute for a lecture, it's something else, it's a different thing altogether', and in the context of the particular relevance of the subject for online learning, she concluded that:

> … education is going to head in this direction but I think we have to be careful

about what we do with it, where we put it and how we use it, not just think that it's a quick fix or that it translates to every subject …

Access and technical issues

As indicated earlier, problems with the conferencing system were compounded by other problems, including firewalls, administrative delays, computer access (including limited university computer facilities and library opening hours) and student inexperience:
I joined the subject a couple of days before the subject started. I didn't get … access until late and when I did I was not on the closed network list. This caused me to doubt that my computer was working properly and frustration as I had completed work but could not post it.

Most of the initial problems were solved early in the semester. In some cases these were simple problems that 'they shouldn't have had.' Subsequent difficulties with the assignment submission system emerged as assessment tasks became due. A student who completed the subject despite enormous technical difficulties which were not overcome until the final part of the semester initially referred to the frustration of feeling 'choked-up' by the inability to communicate and later described the experience as 'harrowing'.

Students were complimentary about the help desk support received, though one commented on the problem that after hours help was not available, given that this was when it was needed most. A related issue was that the subject coordinator was repeatedly called upon by students to give 'a lot of pseudo technical advice … they don't want it from somebody else because they get the feeling that … you're not treating them seriously.'

In terms of the educational design of the subject, the most severe effect was that these problems impacted on students' gaining familiarity with the scheduling expectations related to using the new medium, therefore adversely affecting the development of the learning experiences which the subject was designed to foster.

In response to students' repeated concerns about the 'user unfriendly' system which was 'unduly complicated', the subject coordinator noted the importance of having 'a discussion service system that's supported by the University because you just can't throw these people into the deep end.'

Although the Internet Skills Module on the web site had been intended to forestall some of these problems, she considered that

> … it was of use but I think it was subsumed by the technical problems that occurred at that time and what was meant to be a gentle introduction became a total frustration to them.

Online tasks and discussion

The online tasks and discussion topics were at the heart of the subject's design and participation in them was included as an assessment requirement. The early technical problems affected both those who were not yet online, and others who were waiting for discussion to develop ('I hope they get involved soon … so that we can all enjoy and enhance our learning of the subject with some lively discussions!).

A learning issue which was exacerbated by the slow development of interaction (and lack of reading of initial instructions) was uncertainty about the nature of the contributions. One student stated:

> I was unsure whether I should comment on any other submissions in my response. I was also unsure whether my response ought to take into account the articles in the content section or whether (as it appeared) my view alone was sought.

Some time later the same student commented that 'I have posed questions and have not received any response. I think the assumption made by students is that the discussion list is really nothing more than a bulletin board.' Another expressed 'uncertainty as to how substantial the contributions to the discussions should be':

> Some of the contributions are more like mini-essays, and do not really invite response or comment…because contributions are assessed the temptation is to compose an essay on the discussion topic, but this tends to inhibit interaction.

The subject coordinator considered that discipline-specific factors also affected responses with, on occasion, her content on the web site being treated as definitive:

> They see everything as being 'an authority' … [and] deal with it in a very impartial, objective way, and sometimes as a consequence of not allowing their feelings into it, get it wrong… I deliberately picked things that I thought were quite controversial… [but] they're so conditioned to not talking about how they feel about anything. I wanted them to say 'Outrageous! or Fabulous! or whatever' but no, they [would] just say, 'Under Australian law there would be an infringement …'

Nevertheless, there was student appreciation of the thinking that they were being 'forced' to do:

> I'm enjoying the subject. There's a lot of reading involved. But moreover, a lot of thinking. Because we have to perform tasks and participate in discussions each week we are forced to think about the material. This is a great plus.

In the context of regretting the absence of a 'real world environment' one student noted that 'the subject stimulated a lot of discussion and debate that, ironically, the Internet itself doesn't do justice [to].' Nevertheless, the subject coordinator commented that there was less need for her to intervene as the semester passed and discussion developed, though she felt strongly that 'people needed to know that I was reading their postings, and I was absorbing them, and that it was worthwhile them participating.' She added:

> I think there's a perception with some people that if you have a discussion list it's really an adjunct to a subject and it basically maintains itself but if you don't read it … the students feel that they're posting off into a void …

Despite some difficulties early in the semester when students were asked to pair up to a complete a task, she noted that a joint activity had been 'one of the major steps forward':

> … it was a wonderful opportunity for an undergraduate student to actually work in conjunction with a practising barrister. I think this has been a real plus of the way in which the course is run.

Time and workload

Both students and subject coordinator considered the subject to be time consuming and the workload heavy. Again, this was exacerbated by technical difficulties, with affected students referring to wasted time and the sense that the pace was 'too fast'. An early suggestion, related to lack of Internet access at home, was that students should be advised how often access would be required. Even without these problems 'keeping up with the time frame for discussion topics' could be problematic ('I have trouble completing all the readings by Wednesday of each week, in order to be in a position to make an informed contribution'). An associated concern was the long download and printing times involved in accessing legal resources which were linked from the site.

A comment that 'the work schedule requires at least the 15-20 hours estimated and in my experience requires more' appeared to be widely supported, particularly because of the 'extremely comprehensive' resources and the need for regular interaction. Nevertheless, one student stated:

> Compared to other law subjects the amount of study required is higher. However I realise that the subject is a graduate subject and that this constant high workload will result in better understanding of the material. Really my point is that the philosophy of the subject is quite different to other law subjects I have studied. In other subjects the lecturer doesn't care if you do nothing and don't go to lectures and tutes.

The subject coordinator's workload progressed from early intensive student support (both on technical issues and relating to the tasks and discussion topics) to individual support to assist students who were not interacting in the required way. A particular ongoing issue was the amount of time involved in administrative details:

> I would spend ages fiddling around with mailing lists that I'd have to construct myself and people would drop in or out and I'd have to add in their names … [tasks] that you would normally assume that somebody could do … better than me. It was all right if you only had eight students but it's going to be a nightmare if you've got 50… The Faculty is not used to having DE students and that's something that it has to get used to …

In this context it was seen as important that both the Faculty and the University recognised the workload involved in online teaching, especially as the tasks involved are often not visible to others:

> … I think it's very important that the University recognises that this is not an easy alternative - It's not 'we'll just do it DE and it looks after itself' … And I suppose the other thing that I've been battling at Faculty level is that there's been a perception that it's something you can do easily in the graduate program and that's not necessarily so … if you've got people who are very uncomfortable with technology then you're going to have to put in more work helping them along. It's a lot of work and updating it's going to be a lot of work.

Discussion and Conclusion

Overall, the first offering of Law of the Internet could be considered a qualified success, with reservations mainly relating to the fact that it was a pioneering effort and therefore implemented with limited infrastructure. Particularly positive aspects appeared to be the overall design, including

the impact of online interactivity in achieving student learning outcomes, the involvement of the subject coordinator in the students' learning experience, and the flexibility provided to allow students to study on-campus or off-campus, in Australia or overseas.

Major issues to address in offering learning experiences such as this appeared to be:

- using a system which is as intuitive as possible, allowing time for students to become familiar with it, providing after hours assistance where feasible, and endeavouring to ensure that students know how to access help on technical issues;
- dealing with student attitudes and expectations on a range of issues, from the need for computer access, to the need for self-management involved in online learning, and possibly the need to counter other experiences of content delivery online;
- planning the workload of both teacher and students so that it is managed without sacrificing the benefits of interactivity;
- countering the absence of a real world environment by including appropriate communication channels and scheduling online activities to achieve an appropriate balance between flexibility and collaboration within specified time frames;
- clarifying teacher expectations regarding contributions to online activities and assessment requirements, and exploring how to convey this to students effectively;
- considering factors such as student access to equipment, including download and printing times, and the time students will need to spend online; and
- where possible, working within an institutional infrastructure, so that supports are in place and the demands of online teaching appropriately recognised.

As the subject coordinator indicated, online teaching 'is not an easy alternative.' It requires resolution of institutional, pedagogical and discipline-specific issues with trade-offs to be made in relation to flexibility and workload in order to optimise student learning within the infrastructure available. Acceptance by all concerned that this is 'not a substitute for a lecture, it's something else, it's a different thing altogether' is highly pertinent: it involves acknowledging the need to address some difficult transitional issues as new ways of learning are designed and students are familiarised with them; however, it also opens up a wealth of opportunity to improve the depth and reach of learning offered by the new technologies when they are used appropriately. While the solutions to

many problems may be obvious to early adopters (and the results of this evaluation support findings from other studies), the complex interplay of issues involved repeatedly needs addressing as the magnitude of the shift from traditional teaching affects mainstream activities. Though the subject discussed here is particularly appropriate to online learning, it raises issues applicable to teaching many other law subjects, given the extent of the legal resources now available online and the increasing need to address globally relevant legal issues.

References

Brown, J.S., Collins, A. & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational Researcher,* 18 (1), 32-42.

de Zwart, M. & Benson, R. (1999). Designing a web-based learning environment for the study of law. In *Open, Flexible and Distance Learning: Challenges of the New Millennium.* Collected Papers from the 14th Biennial Forum of the Open and Distance Learning Association of Australia, 27-30 September 1999. Geelong: Deakin University, 97-102.

Ehrmann, S.C. (1997). The Flashlight Project: spotting an elephant in the dark. *American Association for Higher Education.* [Online]. Available: http://www.aahe.org/technology/elephant.htm [8th September 2000].

Entwistle, N. (1997). Contrasting perspectives on learning. In F. Marton, D. Hounsell & N. Entwistle (Eds.), *The Experience of Learning: Implications for Teaching and Studying in Higher Education* (2nd edn). Edinburgh: Scottish Academic Press, 3-22.

Jonassen, D. (1999). Designing constructivist learning environments. In C.M. Reigeluth (Ed.), *Instructional-Design Theories and Models, Volume II: A New Paradigm of Instructional Theory*. Mahwah, NJ: Lawrence Erlbaum.

Laurillard, D. (1993). *Rethinking University Teaching: A Framework for the Effective Use of Educational Technology.* London: Routledge.

Marton, F. (1994). Phenomenography: describing conceptions of the world around us. In T. Husen & N. Postlethwaite (Eds.), *International Encyclopaedia of Education*. Oxford: Pergamon, 4424-4429.

Morgan, A. & Beaty, L. (1997). The world of the learner. In F. Marton, D. Hounsell & N. Entwistle (Eds.), *The Experience of Learning: Implications for Teaching and Studying in Higher Education* (2nd edn). Edinburgh: Scottish Academic Press, 217-237.

Phillips, R. (Ed.), Bain, J., McNaught, C., Rice, M. & Tripp, D. (2000). *Handbook for Learning-centred Evaluation of Computer-facilitated Learning Projects in Higher Education.* Release Version 1.0. Murdoch

University (on behalf of a consortium of universities) and ASCILITE. [Online]. Available: http://cleo.murdoch.edu.au/projects/cutsd99/handbook/handbook.htm [7th August 2000].

Rice, M. (1997). Finding out what works: learning from evaluations of information technologies in teaching and learning. In R. Kevill, R. Oliver & R. Phillips (Eds.), *What Works and Why: ASCILITE '97.* Proceedings of the 14th Annual Conference of the Australian Society for Computers in Tertiary Education (ASCILITE), 8-10 December 1997. Perth: Curtin University of Technology, 492-498.

Ramsden, P. (1992). *Learning to Teach in Higher Education.* London: Routledge.

Turkle, S. (1997). *Life on the Screen: Identity in the Age of the Internet.* New York: Touchstone.

Vygotsky, L. (1978). *Mind in Society: the Development of Higher Psychological Processes.* Cambridge, Mass: Harvard University Press.

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